AMENDED CLAIM SET

1. (currently amended) An exhaust gas purification apparatus for an engine, comprising:

a catalytic converter provided in an exhaust path of said engine and including a carrier, an HC absorbent provided ~~carried~~ on said carrier for absorbing HC in exhaust gas of said engine, a three way catalyst, containing a transition metal as a main element for absorbing CO in an exhaust gas, provided ~~an HC purifying catalyst carried~~ on said HC absorbent ~~carrier and capable of purifying HC desorbed from said HC absorbent, and a transition metal carried on said carrier for absorbing CO in the exhaust gas~~; and

a control apparatus for controlling operation of said engine, said control apparatus including HC desorption timing estimation means for estimating a timing at which HC is desorbed from said HC absorbent and control means for controlling an air fuel ratio upon starting of said engine to a ratio richer than a stoichiometric air fuel ratio to start operation of said engine, changing over the air fuel ratio to a ratio leaner than the stoichiometric air fuel ratio at the timing at which the HC is desorbed based on an output of said HC desorption timing estimation means to heat the three way catalyst by making the absorbed CO react with oxygen contained in the exhaust gas, and maintaining the air fuel ratio at the ratio leaner than the stoichiometric air fuel ratio for a period of time determined based on an actual temperature of the HC absorbent.

2. (currently amended) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said HC absorbent is carried in a layered state on a surface of said carrier, and said three way ~~HC purifying~~ catalyst is carried in a layered state on a surface of the layer of said HC absorbent.

3. (currently amended) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said transition metal is also contained in the HC absorbent~~carried in a layer of said HC purifying catalyst~~.

4. (original) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said transition metal is nickel.

5. (currently amended) The exhaust gas purification apparatus for an engine as claimed in claim 4, wherein the nickel is contained by approximately 20 to 30 g/L in the form of NiO.

6. (previously presented)The exhaust gas purification apparatus for an engine as claimed in claim 1, further comprising:

temperature detection means for detecting one of a temperature of said HC absorbent and a temperature indicative of the temperature of said HC absorbent,

wherein, said HC desorption timing estimation means estimates the timing at which the HC is desorbed based on an output of said temperature detection means.

7. (original) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said HC desorption timing estimation means estimates the timing at which the HC is desorbed based on an elapsed period of time after the starting of said engine.

8. (original) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said HC desorption timing estimation means estimates the timing at which the HC is desorbed based on a total fuel injection amount of said engine after the starting of said engine.

9. (previously presented)The exhaust gas purification apparatus for an engine as claimed in claim 7, further comprising:

water temperature detection means for detecting a temperature of cooling water of said engine,

wherein said HC desorption timing estimation means estimates the timing at which the HC is desorbed additionally based on temperature information detected by said water temperature detection means.

10. (previously presented)The exhaust gas purification apparatus for an engine as claimed in claim 8, further comprising:

water temperature detection means for detecting a temperature of cooling water of said engine,

wherein said HC desorption timing estimation means estimates the timing at which the HC is desorbed additionally based on temperature information detected by said water temperature detection means.

11. (original) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said HC absorbent is zeolite.

12. (currently amended) The exhaust gas purification apparatus for an engine as claimed in claim 1, further ~~comprising~~ comprising:

_____air fuel ratio detection means for detecting an air fuel ratio after said catalytic converter,

wherein, said HC desorption timing estimation means estimates the timing at which the HC is desorbed based on an output of said air fuel ratio detection means.

13. (original) The exhaust gas purification apparatus for an engine as claimed in claim 1, wherein said catalytic converter is provided at a downstream portion of said exhaust path.

14. (original) The exhaust gas purification apparatus for an engine as claimed in claim 13, wherein said engine and said catalytic converter are directly connected to each other without intervention of any other catalytic converter.

15. (new) The exhaust gas purification apparatus as claimed in claim 1, wherein said transition metal is at least one selected from the group consisting of cobalt (Co), zinc (Zn), manganese (Mn), iron (Fe), and chrome (Cr).

16. (new) An exhaust gas purification apparatus for an engine, comprising:

a catalytic converter provided in an exhaust path of said engine and including a carrier, an HC absorbent provided on said carrier for absorbing HC in exhaust gas of said engine, a three way catalyst, containing a transition metal as a main element for absorbing CO in exhaust gas, provided on said HC absorbent; and

a control apparatus for controlling operation of said engine, said control apparatus including HC desorption timing estimation means for estimating a timing at which the HC is desorbed from said HC absorbent and control means for controlling an air fuel ratio upon starting of said engine to a ratio richer than a stoichiometric air fuel ratio to start operation of said engine and changing over the air fuel ratio to a ratio leaner than the stoichiometric air fuel ratio at the timing at which HC is desorbed based on an output of said HC desorption timing estimation

means to heat said three way catalyst by making the absorbed CO react with oxygen contained in the exhaust gas.